2001
CAREER DIRECTIONS
In
COMPUTER & DATA PROCESSING

A Brief Look at…..
Jobs
Outlook
Wages
Education

Hawaii

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Businesses depend on information technology to operate more efficiently and often rely on the computer and data processing services industry to keep up with the changing technology. The industry requires a diverse and well-educated workforce to provide a variety of services that include computer programming services and applications and systems software design, data processing, Internet services, development and management of databases, and many more. The majority of workers are employed as managers; specialists such as systems analysts, engineers, and scientists; and technicians such as computer programmers. Earnings are generally higher due to the demand for specific skills or experience. Job opportunities will be plentiful with employment projected to grow rapidly.

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Selected Occupation/Description	1998 Employment	10-year Growth Rate	Average Annual Openings	1999 Average Wage	Education/Training
Computer Operators: Monitor and control electronic computer to process business, scientific, engineering, and other data according to operating instructions.	930	-28.0%	10	$14.85	Medium-term on-the-job training: Occupations requiring one to 12 months of combined on-the-job experience and informal training. Individuals undergoing training are generally considered to be employed in the occupation.
Computer Programmers: Convert specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information.	1,070	16.8%	50	$20.37	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
Computer Support Specialists: Provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer clients' inquiries in person or via telephone concerning the use of computer hardware and software, including printing, word processing, programming languages, electronic mail, and operating systems.	1,040	90.4%	110	$19.83	Associate's degree: The associate's degree usually requires at least two years of full-time academic work after high school. Occupations in this training category include health related occupations, science and mathematic technicians, and paralegals.
Computer & Information Systems Managers: Plan, organize, direct, or coordinate activities in electronic data processing or system analysis.	850	47.1%	60	$35.63	Work experience plus a bachelor's or higher: Most occupations in this training category are managerial occupations that require experience in a related non-managerial occupation requiring at least a bachelor's degree.
Data Base Administrators: Coordinate physical changes to computer data bases and codes. Test and implement the data base applying knowledge of data base management systems. May design logical and physical data bases and coordinate data base development as part of a project team.	260	34.6%	10	$25.66	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
Data Entry Keyers (excluding composing): Operate keyboard or other data entry devices to prepare data processing input on cards, disks, or tapes. Duties include coding and verifying alphabetic or numeric data.	950	2.1%	10	$10.66	Medium-term on-the-job training: Occupations requiring one to 12 months of combined on-the-job experience and informal training. Individuals undergoing training are generally considered to be employed in the occupation.
Data Processing Equipment Repairers: Repair, maintain and install electronic computers (mainframes, minis, and micros), peripheral equipment, and word processing systems.	140	14.3%	*	$15.06	Postsecondary vocational training: Job-related programs that may or may not result in a degree. Some take less than a year to complete and lead to a certificate or diploma. Others last longer than a year but less than four years.
Electrical & Electronics Engineers: Design, develop, test, and supervise the manufacturing and installation of electrical and electronic equipment, components, or systems for commercial, industrial, military, or scientific use.	930	12.9%	30	$28.28	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
Systems Analysts: Analyze business, scientific, and technical problems for application to electronic data processing systems.	1,800	66.1%	130	$22.52	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
Word Processors/Typists: Use typewriter or word processing equipment to type letters, reports, forms, or other straight copy material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned.	2,990	-27.4%	60	$10.97	Medium-term on-the-job training: Occupations requiring one to 12 months of combined on-the-job experience and informal training. Individuals undergoing training are generally considered to be employed in the occupation.